



OFFICE OF THE DIRECTOR

089012 089012

UNITED STATES GENERAL ACCOUNTING OFFICE
INTERNATIONAL DIVISION
LATIN AMERICAN BRANCH
% AMERICAN EMBASSY
BOX 2016, BALBOA, CANAL ZONE

May 11, 1977

Mr Walter D Bjorseth
Financial Vice President
Panama Canal Company
Balboa Heights, Canal Zone

Dear Mr Bjorseth

The General Accounting Office has completed a survey of the Canal Organization's fiscal year 1977 Capital Investment Program. The survey evaluated the Program's management process to identify areas or projects for which costs could be reduced or eliminated.

We obtained information on the capital budget cycle, analyzed the planning and approval process, examined selected capital projects, and interviewed officials.

The Panama Canal Company incurred an operating loss in fiscal year 1973, and losses have continued through fiscal year 1976. Consequently, greater operating expenses are eliminating the margin that was being used for financing capital improvements and more stringent capital investment planning is required.

The Canal Organization's planned capital investment projects for fiscal year 1977 have an estimated cost of \$32,211,000. We reviewed four of these projects totaling \$7,963,000.

We found that (1) \$93,068 was requested and received in excess of needs on one project, (2) \$6.5 million was approved to procure towing locomotives, even though the justification of need for them was incomplete, and (3) \$1.2 million was authorized and approved for two other projects without considering cost-saving alternatives or providing project coordination.

In our view, better planning and more detailed analysis of project justification is needed to avoid requesting funds in excess of project needs and to preclude the implementation of questionable projects.

Advance engineering, planning, and design -- \$247,000

Funds for advance engineering, planning, and design are included in the capital budget program. The Engineering Division, responsible

9-12-77
089012

for preparing the initial estimate, requested \$400,000 for fiscal year 1977, the same amount approved for fiscal year 1976. During management's review, the amount was reduced to \$247,000.

Officials who prepared the estimate could not provide us with details to support the amount initially requested or the amount subsequently approved. We were advised that the amount requested is generally based on prior requests.

Our analysis of advance planning documents indicates that only \$153,932 was allocated to specifically planned capital projects, therefore, \$93,068 is excess to known needs. In our view, especially during times of stringent budget planning, each capital project should be analyzed in detail to place more reliability on the amount requested for advance planning and past requests should not be the basis for future requests.

We were informed by Company officials that advance planning is a highly valuable tool for expediting projects and for improving budget performance. They agreed, however, that the current year funding is in excess of current year requirements, and they have taken action to reduce the amount.

Procurement of towing locomotives -- \$6.5 million

For fiscal year 1977, \$6.5 million was requested and approved to procure eight towing locomotives. The project was justified on the basis that the current complement of 57 locomotives could not adequately transit ship traffic projected for 1980.

A November 10, 1975, Company study showed that ship transits for fiscal year 1980 would average about 36.7 ships a day, 12.8 of them having an 80-foot or wider beam. Ships with such wide beams require more than four locomotives during transit operations.

Our analysis of historical ship transits for 639 days--January 1, 1975, through November 30, 1976, excluding August and September 1975--showed that the 57 locomotives were able to transit the approximate number and mix of ships projected for 1980. August and September were excluded because records of transits during that period were in different format. The Company's analysis of the same 639 days showed that the level of traffic forecasted for 1980 was handled on 122 days.

In our view, the Company has been able to transit the general level and mix of ships projected for 1980 with the current complement of locomotives. We were advised, however, that the high number of transits were accomplished at the expense of required maintenance. In

this regard, the number of locomotives requiring maintenance at any given time has increased, which further justifies the need for additional locomotives. The following schedule shows the Company's maintenance requirements:

	Fiscal Year			Forecasted 1980
	1974	1975	1976	
Total locomotives	57	57	57	65
Operational units	51	51	48	53
Maintenance units	6	6	9	12

As shown, there was an actual increase of two operational units for fiscal year 1980 over fiscal years 1974 and 1975. The justifications provided to approving authority for procuring eight additional locomotives did not reflect this data. In our view, requests for major capital expenditures should be completely justified and documented to those having approving authority.

Company officials agreed that the justifications provided to the Office of Management and Budget and the Congress for procuring additional towing locomotives did not contain data for operational and maintenance requirements. They said that, during the editing process of putting together Company budget documents, the appearance may have been created that "capacity" was the primary justification when, in fact, it was not. They said also that this project received, and continues to receive, substantial review by the Company Industrial Engineering Staff which is tasked with updating the "Five-Year Canal Improvement Program" document.

Water system improvements -- \$675,000

This project provides for water system improvements in fiscal year 1977 at an estimated cost of \$675,000. It calls for replacement and addition of chlorinating equipment at the Miraflores Filtration Plant and Paraiso and Gamboa Raw Water Pump Stations, construction of chlorine storage sheds at Paraiso and Gamboa, and relocation of existing equipment.

The Maintenance Division was scheduled to install two new chlorinators at the Paraiso Raw Water Pump Station prior to the completion of tank storage sheds scheduled for construction during August 1977. Upon completion of the storage sheds, the chlorinators would have to be relocated.

Since Paraiso has standby chlorinators, the cost to be incurred for the scheduled installation and removal of equipment at a temporary location could be eliminated by delaying installation at Paraiso until the storage shed is constructed. Another alternative would be to advance the construction date of the storage shed.

We brought this matter to the attention of Company officials and were advised that the chlorinators will be installed at Paraiso after the storage shed is constructed, thereby saving an estimated \$25,000.

Renovation of building - \$541,000

This project involves the renovation of a building at an estimated cost of \$541,000. The activities scheduled to be relocated to the renovated building changed significantly from those which were included in the justification to the Company's Board of Directors and to the Congress.

The Board of Directors had approved a request for \$790,000 to renovate building 351 and to provide a new parking area. The justification stated that renovation of this or another comparable building would permit the relocation of the Public Health Office, Management Operations Office, and Ancon Dental Clinic to more adequate facilities. Benefits were stated as centralization of functions for more effective management, relief of parking congestion, and improved facilities to better serve the public. The justifications for relocating the activities contained no statistics on their functions or workload and no details to support the stated benefits to be derived.

The same language was used in the justification to the Congress, but the estimated cost was reduced to \$541,000. At that time, building 265 was being considered for housing the activities being relocated and renovation costs were considered lower. However, no detailed cost estimate was made for renovating building 265, so actual cost may vary significantly from the estimate presented to and approved by the Congress.

According to Health Bureau officials, it was considered too costly to relocate the Ancon Dental Clinic and the relocation was included by mistake in the project justification approved by the Board of Directors. The justification also included the relocation of the Health Bureau's Management Operations Office. The Health Director advised us, however, that this office would not be relocated because there was no activity to fill vacated office space. Even though the relocation of these two activities served to support the need to renovate a building, the activities will remain in their present locations with apparently no adverse effects on operations.

We believe that capital project budgets should be more adequately supported by workload or activity statistics related to potentials for improving the effectiveness of operations. Such justifications should also directly support the indicated benefits in quantitative terms. Significant changes should be rejustified and agreed to by the higher approving authorities. Moreover, this capital project, involving more than one Bureau, did not have one individual who had authority and responsibility to provide the necessary coordination and central direction of the project.

Company officials told us that almost no funds have been spent on the project and that the project has been cancelled. Officials also said that many of the issues we noted concerning the project's desirability were recognized by management and were being studied.

Conclusions

Better planning and more detailed analysis of project justifications is needed to avoid requesting funds in excess of project needs, preclude the implementation of questionable projects, consider cost-saving alternatives, and assure greater coordination in project implementation.

In general, Company officials agreed that the Canal organization can improve its capital programming, and they will look into various alternatives for improved planning, justification, and review.

Because of the corrective actions taken and planned regarding the matters discussed above, we are not making any recommendations nor planning further work on the Canal Organization Capital Investment Program at this time. However, in future reviews, we plan to follow up on corrective actions taken.

We appreciate the courtesies and cooperation extended to our representatives during this survey.

Sincerely yours,



George L. DeMarco
Director